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Research Article

Teacher candidates' perspectives on inclusive education: A case study of mentored inclusive research

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Pre-service teachers desire an innovative and inclusive future for education yet feel underprepared to realistically transform their future classrooms. In this study, teacher candidates were mentored in inclusive research that captured the perspectives of young adults with significant disabilities during their post-school transitions. Following these experiences, those preparing to become teachers in the US reflected on their research participation. Described in this paper are their influences, ideas, and possible implementation strategies, in particular, during the highly unstable times of the pandemic and associated lockdowns. Two key themes of resilience and complexity were considered pivotal to converting research experiences into future inclusive classroom practices. Additional teacher education strategies support future educators with an open and exploratory approach that conveys deep respect for the educational field.

Keywords: Inclusive research; Teacher education; Lived perspectives; Mentored research

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1. Introduction

Countries vary in teacher certification standards and school organization systems, yet share the concern of equity and education for all students. School conditions improve when students feel welcomed by their school and supported to reach their full potential. Inclusive education movements gave gained traction for the benefit of all students, with particular emphasis on students with disabilities. Note that disability terminology is varied, sometimes contentious, and often without consensus (Shakespeare, 2018). Language varies by country, setting, and personal preference, often revealing assumptions about the meaning and nature of phrasing such as "disability, exceptionality, and special needs."

Inclusive approaches update as international education reforms. For instance, Every Student Succeeds Act [ESSA] (2015) in the United States implemented a multiple-measure accountability system to ensure all students, regardless of race, income, disability, or ethnicity, receive a fair, equitable, and high-quality education in public schools. Such mandates focus on learning conditions and outcomes, yet the education of students with disability far too often remains the

responsibility of special needs experts rather than being shared within inclusive school classrooms (Black-Hawkins & Amrhein, 2014).

Segregated educational provision has a long history. One way to succinctly understand its roots is in the medical model of disability. This conceptual framing understands disability through diagnostic criteria. In an educational context, prescriptive teaching and interventions are based on remediating students to as close to 'normal' achievement as possible (Shakespeare, 2018). Such deficit-based approaches are still well-alive in schools around the world (Slee, 2019). In countries like the US, qualification for educational services requires individualized assessment to determine specific barriers to school progress (Individuals with Disabilities Education Act [IDEA], 2004). In turn, the provision of educational services in the US and elsewhere in the world organises learning groups on the basis of labels and perceived abilities.

A traditional special education viewpoint is that students with disabilities have deficits that make their learning needs different. Educators have moved on from these deficit-oriented beliefs, yet historical legacies remain (Slee, 2019). The depth of teachers' commitment to address the needs of a diverse group of learners may be challenged within the realities of their future classrooms (Black-Hawkins & Amrhein, 2014). Despite positive attitudes toward inclusive education, segregated educational solutions often eventuate (Kisbu-Sakarya & Doenyas, 2021). Inclusion requires all teachers, both general and special education educators, to accept the responsibility for creating schools in which all children can learn and feel they belong (Florian & Rouse, 2009). The argument put forth here is that infusing inclusive opportunities, such as mentored research, into pre-service teacher education may impact meaningful changes in the future of inclusive education. Mentored inclusive research may prepare teachers to fundamentally understand the need for inclusion and then meet those needs to further inclusive schools.

1.1. Inclusivity

Inclusion is an idea and a practice. This study engages multiple forms of inclusion; inclusive education in schools and inclusive research. These topics join together to focus the scope of this study on the impacts of participation in inclusive research on pre-service teacher education and the educational decisions of teachers in their future classrooms.

1.1.1. Inclusive education in schools

In its broadest sense, inclusive education is about collective learning and growing together as a diverse student group when everyone feels welcomed and engaged. It is the creation of learning environments where everyone can reach their full potential, through active and shared learning. Most often, inclusive education is a term applied to the education of students with disabilities. An inclusive emphasis promotes opportunities for those students who have traditionally been either excluded or segregated to other schools and settings. In this sense, all students should have the opportunity to learn in the same classrooms within the same schools.

In terms of teacher education's role, preparing all teachers to teach all students is one of the most important aspects of furthering inclusion in education (Subban et al., 2022). Two teacher education formats provide context for comparison of ways that can foster the inclusive and responsive practices of future teachers. The first approach is to embed special education practices into general education coursework. In one study, both students and participating faculty found that special education content could be successfully infused throughout teacher education programs, rather than housing it in separate courses (Jez, 2022). This method was particularly effective when special and general education instructors joined together using a team-teaching approach. Another option to ensure inclusivity in teacher education is to integrate general and special education candidates in their teacher education programs (Sobel et al., 2007). Merged programs send a serious message to all involved (e.g., clinical supervision sites, school leaders, current and future teachers) that every teacher is responsible for the education of every student. Collaborative opportunities such as inclusive assignments, field experiences, and planning were all found to be pivotal in helping foster the knowledge, skills, and professionalism of future teachers.

In turn, pre-service teachers became more confident in their ability to support an increasingly diverse student population in their future classrooms and schools (Sobel et al., 2007). Both approaches can foster the inclusive practices of future teachers, yet may run the risk of being too subtle or considered a hollow commitment amongst the many demands placed upon pre-service teachers.

While teacher education programs have developed over the years, there are still areas where more progress could be made. In particular, in the way that teachers are prepared to confidently include all learners. Taking part in mentored inclusive research may be one way to bridge this gap.

1.1.2. Inclusive research and theoretical frameworks

Taking part in mentored research has become an increasingly common opportunity for university students of all disciplines. Mentored research is considered a rich, transformative, high-impact practice for those university students who participate. Interest in research participation for pre-service teachers is growing internationally. In countries such as the Netherlands, pre-service teacher research has been a compulsory component of primary teacher education for a decade (Van Katwijk et al., 2023). Benefits can include academic achievement and student retention, in particular for those of first-generation and typically underrepresented campus groups. Mentored research participation has also been found to support career decisions and successful career outcomes (Haeger et al., 2020). Student participation in research "impacts educational institutions, communities, and ultimately society as a whole" (Haeger et al., 2020, p. 67). Less considered, however, is how research participation can directly impact the inclusivity of future classrooms, and the specific type, style, or methodology of research that university students are engaged in.

Inclusive research is a broad umbrella term that extends in nuanced ways across approaches such as participatory, emancipatory, and action research. Most fundamentally, inclusive research commits to relevance for those who participate (Garratt et al., 2022). Respect and collaboration impact recruitment of diverse potential participants, which results in a variety of views and experiences are represented. Findings of inclusive research should matter and produce varied ways of knowing (Nind, 2017). Inclusive research holds transformative applicability to benefit all those who participate (Karabon & Johnson, 2020). Research within an inclusive paradigm extends beyond the substance of any one field or topic to portray how and why such knowledge is needed (Burke & Byrne, 2020).

The theoretical basis of inclusive education is one of social justice and human rights. This is an important point since "inclusive education has been generally regarded more as a pedagogical than an ideological question" (Mihajlovic, 2020, p. 84). Merged with the founding principles of inclusive research, a collaborative process is formed of collective decision-making. Together, an inclusive positioning involves changing the relations of research that traditionally separates users and producers. In the case of education research, students with disabilities can take part in research pertaining to them, and by extension, pre-service teachers can contribute to their early career development. The co-production of inclusive research joins people from diverse backgrounds and groups together in support of the disability community through relationship-based work. Inclusion is more than theoretical, it has practical implications for teachers and students not only with diverse abilities, but also students with diverse identities and backgrounds (Nilholm, 2021).

1.2. Scope of Study

Inclusive research within the broader educational field can be used to gain perspectives of school students. Students' insights can inform teaching practices and encourage active reflection from those viewpoints. The gap identified from this study is finding ways to meaningfully prepare teachers to have competence and confidence in their future inclusive practices. Inclusive education research may play a critical role in better equipping teachers to engage with complex viewpoints, topics, and matters of importance to their future students. These skills can be leveraged for success in future teaching practices across diverse contexts. "Inclusive research has under-explored

potential to reinvigorate inclusive education and provide new connections to democracy and social justice in education" (Nind, 2014, p. 525).

Inclusivity is a key issue in today's schools. The specific objective of this study is to provide an initial exploration into the impacts of providing teacher candidates with the opportunity to assist in inclusive research during their teacher education program. The commitment of teacher candidates to be inclusive in their future teaching practices requires a dedication to "step outside 'comfort zones' of the university halls into action, growth and change" (Mason & Connor, 2022, p. 9). Teacher beliefs about inclusive education are a crucial prerequisite for its success, and those beliefs can be addressed during their teacher education. Yet, as Mason and Connor (2022) found, coursework alone cannot fundamentally change the schema of teacher candidates. Other options for deeper engagement can be considered.

2. Method

This section describes two studies. The first description is the inclusive research study in which the teacher candidates were mentored. The scope of their research assistantship is also detailed. Second, data collection procedures on the impacts of mentored research are explained. Analytic strategies are also included.

2.1. Inclusive Research Project

The research study where pre-service teachers served as research assistants was on the topic of school leaving, often referred to in the education field as simply transition. The inclusive feature of the study was to understand the perspectives of young adults with significant disabilities as they completed school. Historically, within the complex mix of those supporting transition, (i.e., teachers, family, administrators, community support agencies) the perspectives of individuals with significant disability have often been overshadowed (Hart et al., 2021). Inclusive transition research therefore enables those living the experience to inform dignified transition procedures and outcomes.

2.2. Mentored Research Participation

As fulltime university faculty, I was approached by two undergraduate students who were preparing to become teachers. Both were interested in taking part of a women's development program that involved mentoring, networking, and a grant to conduct research. I invited these teacher candidates to assist in the described inclusive transition research project. Neither had any prior research experience, yet were interested in this topic since it was introduced to them in prior coursework. At the time of their research assistance, both were in their third year of a four-year teacher education program. They were enrolled in elementary (grade years kindergarten through 6) and special education (grade years kindergarten through 12) integrated, dual certification programs, which meant they had a wide range of options to consider for their teaching futures.

Their research assistantship role was to verify the findings of the inclusive transition study using a process known as participant validation, informant feedback, or member checking. The purpose was to improve the accuracy, credibility, and transferability of the study's initial findings. The woman's development program held a symposium at the end of the year where the research assistants were able to present on this research topic and findings.

As the research mentor, I established a series of virtual field observations at one local school that had specialized programs to support post-school transition into the community. Note that all of the mentored research work occurred during the COVID-19 pandemic and associated lockdowns, so all school-related research was conducted virtually due to safety restrictions. Small group mentoring between professor and teacher candidates, however, occurred in-person. Once the pre-service teachers had a solid understanding of the post-school transition programs and research procedures, each conducted a semi-structed interview with one student from the program. As a research team, we collaboratively reviewed all interview questions. Transition teachers also contributed in crafting interview prompts by supporting the research assistants to

suitably format their questions to the communication preferences and comprehension levels of the students being interviewed. All interviews were held using a remote conferencing platform and were audio recorded. The recordings were then transcribed for analysis.

2.3. Data Collection

About six-months after the conclusion of their research assistantship, both teacher candidates were invited to reflect on their research experiences. At this stage, they were in their fourth and final year in the teacher education program. The premise of the interview was to investigate how teacher candidates perceived the research they took part in and its relevance to their future teaching practices.

The guiding research question asked, what are the impacts for pre-service teachers who participate in mentored inclusive education research, and how might their participation effect (a) future teaching practices and (b) teacher education programs? To investigate, an interview was conducted for one and a half hours, was audio recorded, and then transcribed. Interview probes focused on inclusive and special education, working with students with support needs, inclusive research, and dignified post-school transition procedures (questions based on Gitlin et al., 1999, see Appendix). At the time of their interview, teacher candidates were in student teaching practicums, meaning they spent half a day every day in classrooms preparing for their full-day takeover as student teachers. While this time in a student's program is typically marked as a culmination of experiences in the field, note that these teacher candidates had also experienced a range of alternative remote field experiences due to the lockdowns associated with the pandemic.

As author, primary researcher, and mentor it is important to acknowledge my positionality within this work. Prior to their mentorship, I had been the teacher candidates' instructor in two courses. I served dually as their faculty advisor to oversee their participation in the women's development program, and mentored them as the principal investigator of the inclusive transition research project where they served as research assistants. Also of impact upon this project are my commitments as an inclusive researcher who is committed to disability justice as often evidenced in my teaching and identity on campus.

2.3. Analysis

Inductive content analysis was used to identify interview codes that were developed into themes. Inductive analysis was manually conducted on the transcribed interview data to categorize, tag, and organize themes that arose from the interview, as well as the relationships between those themes. A video presentation was disseminated by the teacher candidates through participation in the women's development program. This video was also transcribed and analyzed in the same manner. In combination, analytic procedures gave way to two central themes with numerous sub-themes and implications within each. Importantly, all findings were presented back to the teacher candidates for their feedback. As was their role in the initial inclusive study, this served as a form of member check to enhance the creditability and trustworthiness of the findings (Cook et al., 2018).

3. Findings

The interview with teacher candidates examined the impacts of participation in an inclusive research study, knowledge which could in turn impact teacher education strategies. Analysis of this interview also revealed broader themes about the purpose of research and the supports perceived to be needed for successful future teaching practices.

> Inclusive research is the study of what works and doesn't work in the field of education. Being able to look at all of the things that impact a student, rather than just one number like their IQ. Being able to study how to be more effective in education. What are we lacking? What are we doing great in? What can we change? How can we be more accommodating? Are we putting students first? Are our classrooms setting up students for success? Ultimately, research helps us improve and go into the future. Yet, inclusive research is also focused on reflection. Then using these reflections to guide

your instruction. It can be large-scale research. Or research can be in your own classroom. Being able to have academic conversations helps me grow as a teacher (teacher candidate interview transcript).

Two themes of resilience and complexity developed from the interview with pre-service teachers. Together, they join to focus on both the value of inclusive research and the future of educational knowledge to best serve the needs of new teachers during complex and transformational times.

3.1. Resilience

While challenges and stressors are often considered to have negative consequences, facing adversity may also hold important opportunities to build resilience. Conducting research during the pandemic held certain obstacles that were openly apparent to the pre-service teachers during their research assistantship. For instance, in-person access to schools and school students was restricted during pandemic-associated lockdowns thus requiring data collection procedures to pivot to virtual access. Another challenge, yet important responsibility, related to the communication preferences of the participants. Communication strategies for individuals with significant disabilities had to be investigated and identified. Teacher candidates were responsible for making these individualized adaptations including the use of non-verbal communication. Upon reflection, teacher candidates found multiple benefits to addressing difficulties through the use of an inclusive focus.

"Students are the experts too. It's their perspective we are trying to analyze and look at. They're the experts" (teacher candidate interview transcript). The ability to gain students' perspectives was reported to be an applicable asset to guiding educational decision-making. The pre-service teachers understood this as a form of backward design. Knowing students' hopes and dreams could guide educational decisions and provide feedback to early career educators for their professional development (Byrd & Alexander, 2020). Teacher candidates described examples of using students' perspectives to inform lesson planning, pedagogy, and other educational decisions. Similarly, understanding the perspectives of future students helped pre-service teachers gain confidence to individualize assessments, particularly with a focus on being capability-orientated. Being flexible to individual adaptations was seen to benefit classroom management, avoid possible interpersonal conflicts, and bolster the inclusive spirit of future classes.

First-hand experience with inclusive research approaches made the pre-service teachers feel prepared to deeply examine students' experiences within their future classrooms, including considerations of learner diversity and individual communication preferences.

It is so important not to assume students wants and academic needs. Their perspectives can express what they like and if they are getting that in their curriculum at school. Inclusive education research makes me think about the student more. It's not just about passing a test or meeting state requirements, it is helping the student. Seeing the student. Meeting them where they're at. Being able to find next steps there. Not just assuming. Or judging. Know the student. Who they are, and accommodate and add supports. Go from there (teacher candidate interview transcript).

Direct engagement with research participants with disabilities built the confidence of teacher candidates to feel that they could establish ways to connect with all of their future students.

Extrapolated further, an inclusive focus could serve as a helpful organizational tool. Pre-service teachers found it challenging to apply the vast scope of research to address their educational decision-making needs. They reported that by inclusively prioritizing students' lived experiences, for example while conducting a literature review, empirical work became more manageable and accessible. A student-centered approach could provide resilient ways to filter and focus a review of educational literature.

3.2. Complexity

"Research in education is about shared experiences" (teacher candidate interview transcript). Taking part in inclusively informed, qualitative research made the pre-service teachers feel prepared to thoroughly examine the complexity of their future classrooms and educational

research. Inclusive research participation developed skills and fostered perseverance. Mentored research experience enabled the teacher candidates to learn about the structure of research, ethical research participation, and the recursive nature of the research process. Each of these aspects developed their personal and professional fortitude, which was an especially helpful skill during the pandemic and was considered to also be applicable in the future.

To the teacher candidates, research associated with reflection. Conducting research was perceived as an applicable tool for teachers' reflective practices. They coined this "small research," similar to what is known in the field as action research (teacher candidate interview transcript). "Small research" could develop and reinforce reflection on teaching practices. In turn, rigorously considered "small research" could then be shared with others in the educational field (e.g., colleagues, school staff) to inform a collective body of "larger research."

"With the large amount of educational research out there it can be hard to navigate, but being student-centered, student focused can help make decisions, guide practices" (teacher candidate interview transcript). The ever-evolving purpose and application of research was also discussed in the interview. Teacher candidates situated inclusive research within an expansive definition of research that extended well beyond empirical studies. In their way of thinking, research could occur, for example, in online networking and social media. Examples were shared by the teacher candidates about how they accessed online platforms to ask questions or share concerns with other in-service and pre-service teachers. Within virtual forums or chats, feedback and ideas were almost instantaneously addressed. The priority of the pre-service teachers was therefore to develop rigorous criticality in their research skills. Inclusive research participation supported their familiarity with the peer-review process, as well as their ability to engage in reflection, critical examination, integration of feedback, and adapting knowledge to personal contexts and situations.

There was an expressed need for research that examines the multi-dimensional aspects of education or "the big picture" (teacher candidate interview transcript) rather than narrowly specialized work in educational sub-fields. Relatedly, the teacher candidates discussed implications related to diversity. They felt research needed to sensitively portray the complexity of current school students. This was also thought to pertain to the evolution of school students over time, for instance, representing a student's developmental progression over their time in school.

"What do they [future students] want to accomplish by the time of their transition out of school, and what impact do they want to make on the world and the community they're in" (teacher candidate interview transcript)? A teacher's ability to support school students to understand their answers to these questions can start early and apply to all ability levels (i.e., students with and without disabilities). Inclusive research helped teacher candidates to determine ways to support their future students on "how to advocate for their education" (teacher candidate interview transcript).

4. Discussion

"There is always something to learn. And learning from the students is the best way to learn" (teacher candidate interview transcript). It has been argued that "three apprenticeships" are needed to prepare inclusive teachers (Shulman, 2004). These are "apprenticeship of the head" (i.e., the cognitive knowledge and theoretical basis of profession); "apprenticeship of the heart" (the ethical and moral dimensions of a professions, attitudes, and beliefs that are critical to the profession); and "apprenticeship of the hand" (the technical and practical skills required to carry out the tasks relevant to one's profession). Inclusive research training may be one way to experience all three such apprenticeships.

In this study, two central themes of resilience and complexity complement and extend prior scholarship. Emphasis on teacher resiliency is a relatively recent area of inquiry. With the focus primarily on teacher retention, resiliency often pertains to the contextual and individual factors that lead to job satisfaction, burnout, and well-being (Ainsworth & Oldfield, 2019). Future investigations of resiliency can also concentrate on teacher education and the multi-dimensional

ways to thrive within the field (Mansfield, Beltman, Broadley, Weatherby-Fell, 2016). Teacher education programs can strengthen the metaphoric muscles of pre-service teachers to reframe adversity as learning opportunities. This is of particular importance because, as seen through pandemic-related experiences, some of the barriers that teachers will face may not even currently exist. Resiliency therefore becomes "a quality that enables teachers to maintain their commitment to teaching and their teaching practices despite challenging conditions and recurring setbacks" (Brunetti, 2006, p. 813).

Working resiliently also requires complexity development. Disability inclusion is vitally important, yet disability is only one aspect of a student's complex and intersectional identity (Kilinc, 2022). To achieve inclusive outcomes for all students, teachers need adequate preparation, specifically on inclusive practices (Mason & Connor, 2022). Special educators have historically been charged to individualize curriculum for targeted students. When all educators develop the ability to frame the complexity of their classroom students as an asset, they can make deeper connections with their students, and in turn, can support their students in making deeper connections with one another. The first step is therefore supporting the development of inclusive skills of educational professionals (Mason & Connor, 2022).

5. Implications and Future Research

Merging the themes of resiliency and complexity, mentorship of student research furthers the structured and methodical approaches of inclusive scholarship. With enhanced skills in these areas, teachers will have a skillset to comprehensively examine the intricacies of their future classrooms and the students within. The implications for teacher education programs are to find ways to support teachers to learn more about how to resiliently navigate the complex diversity of their future classrooms. Inclusive mentored research is a fruitful area for future focus that can combine apprenticeships of the head, heart, and hand (Shulman, 2004).

One additional point raised by the teacher candidates was to extend inclusiveness in research participation. Participation parameters often require research participants to identify within traditional demographic categorizations (e.g., race, gender, etc.). It was suggested that more space be made to include the diverse identities of those who participate in research. Alternative suggestions may be to either dismantle labeling and categorization altogether or provide this information in novel or nuanced ways. This consideration extends to breaking down disability labels and categorization, as future disability-relevant research may integrate specialized educational subfields and stimulate more inclusively focused research content.

Returning to practical considerations, it is unrealistic to expect that every teacher candidate will have research access during their studies. Teacher educators can still apply these findings of resilience and complexity within their programs. A range of experiences and perspectives can be ensured through mentored access to relevant research literature. In particular, scholarship that is inclusive in scope, such as research conducted within a framework of disability studies in education. Such research will provide future educators, including special educators, a grounded understanding of the systematic inequality and marginalization that has resulted from a collective social response to disability (e.g., Nind, 2017). A thorough introduction to inclusive research can encourage all pre-service teachers to critically examine educational research and pedagogical practices. Mentoring inclusive research skills through relevant literature may involve, for example, familiarization with the format and structure of research papers, introducing key terms commonly used in research studies, experience with feedback and the process of peer review, consideration of the iterative and theoretical aspects of research, and trustworthiness of sources. Another suggestion is for instructors to share their own research work with students, and reciprocally, invite engagement in how this work is perceived. First-hand examples of research can make abstract research concepts more tangible.

6. Limitations

The focus on inclusive research is only one aspect of a multifaceted process of teacher education. It is acknowledged that a range of other aspects require consideration, such as the specific needs of the field and local communities, as well as certification demands (Jez, 2022). Many in-service teachers continue to view their education work through the lens of their teacher preparation standards (Byrd & Alexander, 2020). Focus on the human rights aspects of inclusive education may be perceived as important yet superfluous to the array of requirements and demands on the attention of pre-service teachers.

Participation sample size is another evident matter. This study makes no claims for generalization. Furthermore, the extent to which inclusive research is specifically connected to the outcome of inclusive future teaching cannot be determined from this investigation. It might be that any structured mentorship of research, inclusive or otherwise, could be of equal value.

Although in another sense, a small sample size gave way to research relationships and epistemological commitments that are well aligned to research conducted under an inclusive paradigm (Nind, 2017). Quality indicators such as the appropriate selection of participants, inclusion of a researcher positionality statement, and member checks all enhance the rigor and trustworthiness of the findings of this study (Cook et al., 2018). Additionally, the benefits of gaining insights from groups of people whose voice is seldom heard, should not be undervalued.

The coded findings were established by the researcher and member checked by the teacher candidate research participants. One future suggestion might be for the findings to be reviewed by another unbiased researcher with the results compared. In all, the power of mentored research conveys a relevant option for expanding the capabilities of future teachers.

7. Conclusion

Mentored inclusive research participation impacted the resilience and complexity development of pre-service teachers. Insights gleaned from their experiences can impact teacher education programs and teaching practices of future teachers. The inclusive layers nested within this project involved implications for both classroom students and those preparing to teach them.

7.1. Practical Suggestions

Participation in inclusive research supported pre-service teachers to access what are oftentimes marginalized perspectives, those that can be challenging to discern (i.e., inconsistently verbal or non-verbal forms of communication). Mentored research experiences can promote confidence to connect with a more diverse group of future students. Similarly, participating in inclusive research can reframe perspectives. Strong theoretical framing can ground the ability to inclusively address issues of the educational field. The utility of research procedures such as the recursive nature of research serves as a practical application to address complex and diverse needs of students over the developmental stages of the educational lifespan.

From these initial findings, future research may focus more on longitudinal work that spans educational cycles and transitions of school students over their developmental timeframes. Opportunities for future studies can build an ordered account of longer-term understandings of key events over students' educational lives. In the future, educational specializations may also merge into a more interdisciplinary focus. An interdisciplinary scope might help develop more creativity and criticality for education research to engage complex issues such as inclusivity. Additionally, the segmentation of student demographic data has led, at least in part, to stereotypes about students, especially those with disabilities. Future scholarship may give way to a more complex ways of deeply knowing and identifying participants in research, and in turn, students in our schools.

A case study of mentored research can serve as a general reminder of the fundamental importance of all of our relationships, especially during the pandemic, a time overshadowed by remote isolation. Inclusive practices instill an understanding that teacher education requires more

than alignment with certification standards or apprenticeships of the head and hand (Shulman, 2004). Collaborative guidance, supportive time, care, and attention, can all serve to develop an apprenticeship of the heart.

This study advances teacher education and inclusive practices by offering mentored research to bolster the inclusive experiences of pre-service educators. New insights can come from their inclusive experiences towards becoming future leaders in the educational field. Since this is a small case study, the hope is that this work serves as a catalyst to a larger research conversation. Meaningful access to inclusive research can increasingly become a part of teacher education by ensuring diversity embraces the complex needs of all students and their support networks. Inclusive research may offer one key piece to advance teacher education and inclusive practices. Together, each serves as a component part of a complex process of teacher education's work to realize inclusive education (United Nations, 2006).

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Appendix. Probes for pre-service teacher interview (based on, Gitlin et al., 1999).

1. What is educational research (in your own words, not a definition)?
2. What are the goals of educational research?
3. What made you interested in doing education research?
4. How does educational research impact your classroom teaching?
5. In your opinion, who are the experts about school? E.g., what we do, teach, etc. Does research reinforce or conflict with that view and why?
6. When you are conflicted about an education decision (e.g., teaching approach), how do you decide which way to go? Then, how do you determine if your decision was correct?
7. How did participating in an inclusive research study impact or re-frame your perspectives on (a) working with students with special needs, (b) the field of special education, (c) your future teaching practices.
8. Watch your video presentation. Select a quote that stands out to you. What was the quote? What did it mean to you? Why did you select it?
9. Anything else that I didn't ask about that you think I should know?